

2016 Remedial Investigation Field Status

Completed All Field Work Outlined in Governing Documents as Approved, Conditionally Approved, or Directed:

- ▶ Floodplain Soil
 - ▶ Included additional deep samples on property and in reference to be consistent with DSA
- ▶ Surface Water / Groundwater Interaction Acidic Pond & Leviathan Creek
- ▶ Hydrocarbons
- ▶ Bryant Creek Surface Water
- ▶ Fish
- ▶ River Ranch
 - ▶ Except deep samples at 6 locations
- ▶ East Fork Carson River
 - ▶ Except spring surface water sampling
 - ▶ Included additional sampling for luminescence dating
- ▶ Suspected Ore Piles
- ▶ Leviathan Mine Road

2016 Remedial Investigation Field Status

Completed All Field Work Outlined in Governing Documents as Approved, Conditionally Approved, or Directed:

- ▶ Mine Waste Reference Soil
- ▶ Benthic Invertebrates Reference Creeks
- ▶ Plants and Habitat-Related Soil
 - ▶ To the extent possible
- ▶ Drilling
 - ▶ Except hydraulic testing
 - ▶ Groundwater sampling

2016 RI Field Work Status

2016 Drilling Plan

- ▶ Drilled, installed, developed, and surveyed 9 wells
 - ▶ One in ACSA, two in RSA, and six in perimeter of LCSA and ACSA
 - ▶ Based on field conditions, deep wells installed at LOC-39 and LOC-40 instead of shallow wells; need for shallow wells to be evaluated when lab data received
 - ▶ Hydraulic testing not completed
- ▶ Sampling
 - ▶ Reference and perimeter wells sampled monthly (October and November) as planned
 - ▶ ACSA well sampled once during fall groundwater monitoring event as planned

2016 RI Field Work Status

Plants and Habitat-Related Soil

- ▶ Full objectives met for 14 of 22 target species
 - ▶ Partial objectives met for 7 species (less than 2 samples collected because not present in all study areas)
 - ▶ Snowberry
 - ▶ Yellow sweet clover
 - ▶ Woolly mules ear
 - ▶ Tansy mustard
 - ▶ Sand seed
 - ▶ Mormon tea
 - ▶ Watercress
 - ▶ No samples collected for one species (Wapato) because not present in any study area
 - ▶ Biologists conducted field reconnaissance with Washoe Tribe representative to attempt to locate species that were not observed in all study areas
 - ▶ Associated soil samples collected at all locations where plant samples collected
 - ▶ Objectives met to extent possible
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2016 Feasibility Study Field Status

Completed All Field Work Outlined in Governing Documents as Approved, Conditionally Approved, or Directed:

- ▶ **Revegetation Study**
 - ▶ Except double-ring infiltrometer testing
- ▶ **Geotechnical Investigation**
 - ▶ Except rock coring, televiewer survey, and inclinometer installation in GB-01

RI Work Planned for 2017 as of 12/13/16

- ▶ Surface Water / Groundwater Interaction Acidic Pond & Leviathan Creek
 - ▶ For 36 DPZs, monthly water levels and surface water and groundwater samples in spring and fall
 - ▶ Data Gaps Identified:
 - ▶ Isolate uncaptured portion of Delta Seep to measure flow and collect samples
 - ▶ Install additional DPZs and weir in Leviathan Creek above concrete channel; monthly flow and water levels
- ▶ Beaver Dam/Pond Complex:
 - ▶ Data Gaps Identified:
 - ▶ Collect additional floodplain samples to evaluate total and leachable metals and potential acid generation
 - ▶ Install DPZs adjacent to floodplain soil samples to evaluate the corresponding concentrations in groundwater
 - ▶ Collect additional precipitate samples for total and leachable metals
 - ▶ Collect surface water samples for laboratory analysis along beaver pond complex to refine spatial resolution of RI/FS metals and general chemistry data
 - ▶ Identify mineralogy of precipitate and floodplain soil if possible to refine geochemical model

RI Work Planned for 2017 as of 12/13/16

- ▶ Drilling
 - ▶ Hydraulic testing of 5 wells installed in 2015 and 9 wells installed in 2016
- ▶ Reference
 - ▶ Mapping in Upper Leviathan and Aspen Creeks
 - ▶ Reference and Perimeter Wells – continue monthly monitoring (water levels and groundwater samples)
- ▶ River Ranch
 - ▶ Deep samples at 6 locations
- ▶ East Fork Carson River
 - ▶ Collect surface water samples at 8 locations in spring
- ▶ Bioaccessibility Testing
- ▶ Plant Biomass Estimation
- ▶ On-Going Monitoring Programs
 - ▶ Groundwater
 - ▶ Surface Water
 - ▶ Acid Drainage Discharges and Weirs
 - ▶ Storm Water and Snowmelt
 - ▶ Upper Tributary
 - ▶ Meteorological

Feasibility Study Field Work Planned for 2017

- ▶ Revegetation Study
 - ▶ Continue monitoring of hydrology and revegetation plots
 - ▶ Double-ring infiltrometer testing
- ▶ Geotechnical Investigation
 - ▶ Rock coring, televiewer survey, and inclinometer/pressure transducers installation in GB-01
 - ▶ Monitor slope inclinometer/pressure transducers